TABLE B–2—ASSUMED AVERAGE ENERGY
CONTENTS

Fuel type	Average heat content
Bituminous Coal	24 MMBtu/ton.
Subbituminous Coal	18 MMBtu/ton.
Lignite Coal	14 MMBtu/ton.
Residual Oil	6.2 MMBtu/bbl.

APPENDIX C TO PART 72—ACTUAL 1985
YEARLY SO$_2$ EMISSIONS CALCULATION

The equation used to calculate the yearly
SO$_2$ emissions (SO2) is as follows:

SO2 = (coal SO$_2$ emissions) + (oil SO$_2$ emissions) (in tons)

If gas is the only fuel, gas emissions are defaulted to 0.

Each fuel type SO$_2$ emissions is calculated
on a yearly basis, using the equation:

fuel SO$_2$ emissions (in tons) = (yrly wtd. av.
fuel sulfur %) × (AP–42 fact.) × (1−scrb.
effic. %/100) × (units conver. fact.) × (yearly
fuel burned)

For coal, the yearly fuel burned is in tons/
yr and the AP–42 factor (which accounts for
the ash retention of sulfur in coal), in lbs
SO$_2$ ton coal, is by coal type:

Coal type	AP–42 factor
Bituminous, anthracite	39 lbs/ton
Subbituminous	35
Lignite	30

For oil, the yearly fuel burned is in gal/yr.
If it is in bbl/yr, convert using 42 gal/bbl oil.
The AP–42 factor (which accounts for the oil
density), in lbs SO$_2$/thousand gal oil, is by oil
type:

Oil type	AP–42 factor
Distillate (light)	142 lbs/1,000 gal
Residual (heavy)	157

For all fuel, the units conversion factor is
1 ton/2000 lbs.

APPENDIX D TO PART 72—CALCULATION
OF POTENTIAL ELECTRIC OUTPUT CAPACITY

The potential electrical output capacity is
calculated from the maximum design heat
input from the boiler by the following equation:

$$\frac{\text{max. design heat input}}{3} \times \frac{\times 1 \text{ kw-hr}}{3413 \text{ Btu}} \times \frac{\times 1 \text{ MWe}}{1000 \text{ Kw}}$$

For example:

(1) Assume a boiler with a maximum design heat input capacity of 340 million Btu/
hr.

(2) One-third of the maximum design heat
input capacity is 113.3 mmBtu/hr. The one-
third factor relates to the thermodynamic
efficiency of the boiler.

(3) To express this in MWe, the standards
conversion of 3413 Btu to 1 kw-hr is used:
113.3×10^6 Btu/hr×1 kw-hr / 3413 Btu×1 MWe /
1000 kw=33.2 MWe

[58 FR 15649, Mar. 23, 1993]

PART 73—SULFUR DIOXIDE ALLOWANCE SYSTEM

Subpart A—Background and Summary